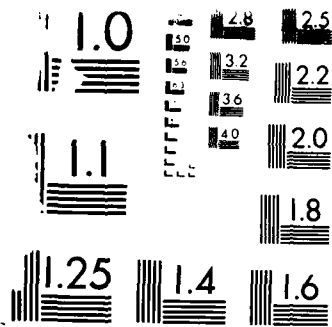


PLANNING WITHIN THE PLANNING PROGRAMMING AND BUDGET
PROCESS(U) NAVAL POSTGRADUATE SCHOOL MONTEREY CA
C E HANCE SEP 86

UNCLASSIFIED

F/G 5/1

NL



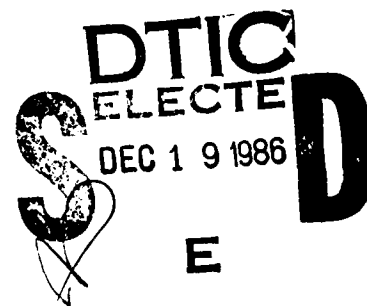
PC-RESOLUTION TEST CHART

1963-A

AD-A175 313

DTIC FILE COPY

NAVAL POSTGRADUATE SCHOOL
Monterey, California



THESIS

PLANNING WITHIN THE
PLANNING, PROGRAMMING, AND BUDGETING PROCESS

by

Carl E. Hance

September 1986

Thesis Advisor:

Jerry L. McCaffery

Approved for public release; distribution is unlimited

86 12 19

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

ADA175313

REPORT DOCUMENTATION PAGE

1a REPORT SECURITY CLASSIFICATION UNCLASSIFIED			1b. RESTRICTIVE MARKINGS	
2a SECURITY CLASSIFICATION AUTHORITY			3 DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release; Distribution is unlimited	
2b DECLASSIFICATION/DOWNGRADING SCHEDULE				
4 PERFORMING ORGANIZATION REPORT NUMBER(S)			5 MONITORING ORGANIZATION REPORT NUMBER(S)	
6a. NAME OF PERFORMING ORGANIZATION Naval Postgraduate School		6b OFFICE SYMBOL (If applicable) 54	7a. NAME OF MONITORING ORGANIZATION Naval Postgraduate School	
6c. ADDRESS (City, State, and ZIP Code) Monterey, CA 93943-5000			7b. ADDRESS (City, State, and ZIP Code) Monterey, CA 93943-5000	
8a NAME OF FUNDING/SPONSORING ORGANIZATION		8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER	
8c. ADDRESS (City, State, and ZIP Code)			10 SOURCE OF FUNDING NUMBERS	
			PROGRAM ELEMENT NO	PROJECT NO
			TASK NO	WORK UNIT ACCESSION NO
11 TITLE (Include Security Classification) PLANNING WITHIN THE PLANNING, PROGRAMMING, AND BUDGETING PROCESS				
12 PERSONAL AUTHOR(S) HANCE, Carl E.				
13a TYPE OF REPORT Master's Thesis		13b TIME COVERED FROM _____ TO _____	14 DATE OF REPORT (Year, Month, Day) September 1986	15 PAGE COUNT 89
16 SUPPLEMENTARY NOTATION				
17 COSATI CODES			18 SUBJECT TERMS (Continue on reverse if necessary and identify by block number) Planning, PPBS, Budgeting	
FIELD	GROUP	SUB-GROUP		
19 ABSTRACT (Continue on reverse if necessary and identify by block number) This paper evaluates the Planning Phase of the Planning, Programming, and Budgeting System (PPBS) used in the Department of Defense (DOD). The evaluation includes the evolution of the PPBS and the participants in the Planning Phase used in the DOD budget process. Conclusions drawn are that the Planning Phase of PPBS is the least studied or understood of all the Department of Defense (DOD) budgeting system phases. Also, public opinion, the intelligence services, and the final budget can cause the National Security Council (NSC) and the Joint Chiefs of Staff (JCS) to modify their planning, but the major influence is the NSC and JCS appraisal of the enemy threat and assets needed to ensure national security.				
20 DISTRIBUTION/AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT <input type="checkbox"/> DTIC USERS			21 ABSTRACT SECURITY CLASSIFICATION Unclassified	
22a NAME OF RESPONSIBLE INDIVIDUAL Jerry L. McCaffery			22b TELEPHONE (Include Area Code) 408-646-2554	22c OFFICE SYMBOL 54Mr.

Approved for public release; distribution is unlimited

Planning within the
Planning, Programming, and Budgeting Process

by

Carl E. Hance
Lieutenant Commander, United States Navy
B.S., U. S. Naval Academy, 1973

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
September 1986

Author: _____

CE Hance
Carl E. Hance

Approved by: _____

Jerry L. McCaffery
Jerry L. McCaffery, Thesis Advisor

James R. Duke
James R. Duke, Second Reader

Willis R. Greer, Jr.
Willis R. Greer, Jr., Chairman
Department of Administrative Sciences

Kneale T. Marshall
Kneale T. Marshall,
Dean of Information and Policy Sciences

ABSTRACT

This paper evaluates the Planning Phase of the Planning, Programming, and Budgeting System (PPBS) used in the Department of Defense (DOD). The evaluation includes the evolution of the PPBS and the participants in the Planning Phase used in the DOD budget process. Conclusions drawn are that the Planning Phase of PPBS is the least studied or understood of all the Department of Defense (DOD) budgeting system phases. Also, public opinion, the intelligence services, and the final budget can cause the National Security Council (NSC) and Joint Chiefs of Staff (JCS) to modify their planning, but the major influence is the NSC and JCS appraisal of the enemy threat and assets needed to ensure national security.

Accession For	
NTIS GRA&I	<input checked="checked" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	



TABLE OF CONTENTS

I.	INTRODUCTION.....	6
II.	THE PLANNING, PROGRAMMING, AND BUDGETING SYSTEM (PPBS).....	10
	A. OVERVIEW.....	10
	B. PLANNING.....	13
	C. PROGRAMMING.....	17
	D. BUDGETING.....	19
	E. SUMMARY.....	20
III.	HISTORY.....	22
	A. GENERAL.....	22
	B. PRE-WORLD WAR II.....	23
	C. WORLD WAR II.....	24
	D. 1945-PRESENT.....	26
	E. SUMMARY.....	29
IV.	THE JOINT CHIEFS OF STAFF (JCS).....	31
	A. BACKGROUND.....	31
	B. DEFENSE GUIDANCE.....	33
	C. JOINT STRATEGIC PLANNING SYSTEM (JSPS).....	36
	D. SUMMARY.....	40
V.	THE NATIONAL SECURITY COUNCIL (NSC).....	42
	A. BACKGROUND.....	42
	B. EVOLUTION.....	44
	C. BUDGET.....	46

D. SUMMARY.....	49
VI. OTHER CONTRIBUTORS TO PLANNING.....	51
A. GENERAL.....	51
B. INTELLIGENCE AGENCIES.....	53
C. DEFENSE RESOURCES BOARD.....	57
D. PUBLIC OPINION.....	59
E. SUMMARY.....	61
VII. CONCLUSIONS.....	62
A. THE PPBS.....	62
B. THE JOINT CHIEFS OF STAFF.....	67
C. FUTURE CONSIDERATIONS.....	68
LIST OF REFERENCES.....	71
INITIAL DISTRIBUTION LIST.....	88

I. INTRODUCTION

The Planning, Programming, and Budgeting System (PPBS) is not a new idea. It had been proposed as a form of budgeting in the federal government as early as 1954, but was not used because of political conflict until the time of Secretary of Defense Robert McNamara. "Program budgeting was not widely used in government until Charles Hitch and Robert McNamara employed a variation of the technique, the Planning-Programming-Budgeting System (PPBS) in the Department of Defense (DOD) in 1961." [Ref. 1:p. 37] In the twenty-five years that have elapsed since then, PPBS has persisted.

PPBS is a system of budgeting which identifies a problem, plans its solution, programs the best solution, and provides money for the program through a budget. Brundage feels the "object of PPB (Planning-Programming-Budgeting) is simply to apply accounting and economic analyses to help arrive at the best decisions in the allocation of available resources." [Ref. 2:p. 62] Mosher in turn believes that "much public budgeting is 'historical', a mere transfer forward of the past into the future." [Ref. 3:p. 47]

What to budget for in the DOD is of paramount concern to the security and survival of the nation. Augustine stated that to prepare to fight a short war or a long war, we "must do some serious planning backed with actions." [Ref.

4:p. xiv] Kingston-McCloughry has noted "it is a mistake to have any preconceived ideas about what will happen in diplomacy and war." [Ref. 5:p. xi] Additionally, "to prepare for the next war with the weapons of the last can lead to disaster in mobilization policy as in military strategy." [Ref. 6:p. v]

The nation's leaders are responsible for its defense, and as such must determine the optimal course of action to safeguard the country. Towle best sums up the problems facing the nation's leaders: "Preparing for war and assessing the military power of potential enemies and allies are the two most important and most difficult tasks of the armed forces in peacetime." [Ref. 7:p. 11] Determining the strengths and weaknesses of an enemy go far in determining the assets needed to counter him. Hitch and McKean assert that two common mistakes in dealing with the enemy are to regard him as stupid, inflexible, and lacking in initiative, and to regard him as diabolically cunning, with unlimited flexibility, and with boundless initiative. [Ref. 8:p. 164]

In assessing an enemy's capabilities, McNamara believed that it was not essential that the enemy make decisions on the same basis we do, but that we must try to anticipate what the enemy forces will be and how he will apply them. [Ref. 9:p. 36] Because of the rapid evolution of technology,

it is a major consideration in national security, more urgent when envisioning a major war. [Ref. 10:p. 33]

In assessing an enemy, the scientific and technologic capabilities must be considered. Aron, the French writer, points out that care must be exercised in evaluating capabilities or the result could be no "difference between Switzerland and China, thanks to the equalizing power of the atom." [Ref. 11:p. 105] Additionally, economic and political capabilities of a potential enemy must also be considered. Brown and Korb believe there are eight interrelated economic and political factors which must be considered in development of a budget for national security:

1. This nation does not have the resources to support fully our present military policy.
2. Responsible political leaders are rarely able to provide concrete guidance to our military leaders on how this country will respond in specific situations.
3. The length of time involved in the production of the defense budget can make outmoded or irrelevant any policy guidance that may have been given.
4. Because of its enormous size, the defense budget can have a dramatic effect upon the economic health of the nation.
5. There is no purely scientific way of allocating limited resources to support a particular national security policy.
6. Even if all the right decision-making tools were available, the scope of the defense budget is simply too vast for any one central authority to administer in a coherent manner.

7. The output of the defense budget process is severely constrained by political realities.
8. Present policy options are often constrained by past budgetary decision.[Ref. 12:pp. 581-584]

All eight of these factors must be considered in preparing a budget for national defense. The PPBS used within DOD relies heavily upon the Planning Phase to obtain a budget. This thesis uses a review of available literature to define how planning is formalized in the PPBS process.

Chapter Two will explain PPBS in greater detail and emphasize the importance of Planning to this process. Chapter Three will focus on the evolution of budget formulation. Chapter Four will explain the role of the Joint Chiefs of Staff (JCS) in the Planning process. Chapter Five will explain the role of the National Security Council (NSC) in the planning process. Chapter Six will explain the role of other contributors to the planning process. Chapter Seven will conclude with a description of current concerns in the Planning process.

II. THE PLANNING, PROGRAMMING, AND BUDGETING SYSTEM (PPBS)

A. OVERVIEW

PPBS was intended to force all agencies in the federal government to define objectives and the cost of those objectives by using analysis. The results of the analysis would then become the agency's program and be integrated with conventional budgets. This programmed budget would thus communicate to people inside and outside the agency what the organization was trying to do and how it was going to accomplish the objectives. [Ref. 13:p. 289]

Politicians know that to get something done in a bureaucracy takes commitment from agencies which will carry out assigned policy. Schlesinger put it very succinctly when he stated "Political leaders are keenly aware that in formulating policy you must start from where you are." [Ref. 14:p. 310] PPBS seemed an answer to the problem between policy formulation and its execution. President Johnson had great faith in PPBS, believing that once in operation it would:

1. Identify our national goals with precision and on a continuing basis;
2. Choose among those goals the ones that are most urgent;
3. Search for alternative means of reaching those goals most effectively at the least cost;

4. Inform ourselves not merely on next year's costs- but on the second, and third, and subsequent year's costs- of our programs;
5. Measure the performance of our programs to ensure a dollar's worth of service for each dollar spent. [Ref. 15:p. 63]

Unfortunately, President Johnson was not the only player impacting on PPBS; Congress was involved in the Budgeting Phase. The political conflicts in Congress and within agencies did not allow PPBS to succeed outside DOD.

Other writers held beliefs similar to President Johnson's. The Otts believe the hallmarks of PPBS are:

1. Specification of the objectives to be achieved through federal spending.
2. Investigation of alternative means of achieving the objective.
3. Minimization of the costs or comparison of costs and benefits.
4. Systematic use of analysis throughout the process. [Ref. 16:p. 25]

All these hallmarks are found in the DOD budget process.

Charles Schultze, the Director of the Bureau of the Budget, was also committed to the success of PPBS. He identified six goals of that budget system:

1. Careful identification and examination of goals and objectives in each major area of government activity.
2. Analyze the output of a given program in terms of its objectives.

3. Measurement of total program cost, not for just one year but for at least several years ahead. [Provide the design maker with all the relevant costs that his decision would entail.]
4. Formulation of objectives and programs extending beyond the single year of the annual budget submission.
5. Analysis of alternatives to find the most effective means of reaching basic program objectives, and to achieve these objectives for the least cost.
6. The establishment of analytic procedures as a systematic part of budget review. [Ref. 17:pp. 19-23]

The goals were largely met in DOD, but the crucial aim (item 5) was handicapped by politics in the Congress. As a result, the whole PPBS process was given only token consideration outside DOD.

PPBS can be condensed into three basic ideas, identified by the Musgraves:

1. There is a need to look at the program and planning unit as a whole.
2. A proper evaluation of an expenditure program requires scrutiny of more than one time period.
3. Cost-benefit analysis should be applied where feasible and expenditure programs should be evaluated in these terms. [Ref. 18:pp. 198-199]

The principal objective of PPBS is to improve the basis for major program decisions. [Ref. 19:p. 1] To achieve this objective, PPBS requires support built around three documents defined as follows:

1. Program Memoranda (PM) - presents the agency head's major program recommendations to the President within a framework of agency objectives, identify

alternatives, and support decisions of the basis of their contribution to the achievement of the objectives.

2. Program and Financial Plan (PFP) - presents in tabular form a complete and authoritative summary of agency programs in terms of their outputs and costs.
3. Special Studies (SS) - provide analytic groundwork to decisions reported in the Program Memoranda. [Ref. 20: p. 2]

Considerations other than the enemy threat must also be made. Kingston-McCloughry noted that "the state of a nation's economy has always been a controlling factor in the size and shape of her armed forces." [Ref.21:p. 5] In order to achieve national security, yet remain within the bounds established by the nation's economy, a system must be established which can account for alternatives and costs. PPBS is the result.

B. PLANNING

Webster defines planning as:

A method of achieving something: a way of carrying out a design; a detailed and systematic formulation of a large scale campaign or program of action; a proposed undertaking or goal. [Ref. 22:p. 1729]

Euske has stated that the "purpose of a plan is to bring about behavior that leads to desired outcomes." [Ref. 23:p. 15] To achieve the desired outcomes the plan must:

1. Describe some actions and outcomes.
2. Serve as a formal vehicle of communications [Ref. 24:p. 17].

There are several other acceptable definitions of planning. "The orthodox expectation in planning is the development of a strategic plan followed by a determination of requirements for carrying it out." [Ref. 25:p. 25] The systems approach to planning holds as its first consideration the selection of mission or objective. [Ref. 26:p. 501] Novick believes that in planning "one seeks a continual review of objectives and the means for their attainment." [Ref. 27:p. 2] He also believes that "planning is the selection of courses of action through a schematic consideration of alternatives." [Ref. 28:p. 2] Smith best sums up planning as "deciding in advance what you intend to do and how you intend to do it." [Ref. 29:p. 113]

Schick defines strategic planning as "the process of deciding on objectives of the organization, on changes in these objectives, and on the policies that are to govern the acquisition, use, and disposition of these resources." [Ref. 30:p. 2] "The plan represents the agency head's judgment on what the agency's future course of action should be to meet those national needs with which his agency is concerned." [Ref. 31:p. 1]

Planning is the first phase in the PPBS process. "In the planning phase the role and posture of the United States and the DOD in the world environment are examined, with

particular emphasis on Presidential policies." [Ref. 32:p. 1] There are five stages identified by Collins which summarize defense planning:

1. Specify purposes.
2. Appraise opposition.
3. Formulate strategy to satisfy objectives in face of all obstacles.
4. Allocate resources to cover requirements without intolerable risk.
5. Review alternatives, if available assets are insufficient to support preferred concepts. [Ref. 33: p. 3]

There are some minor disagreements of what planning is in the budget process. Evans holds that planning is "the process of determining military objectives and corresponding force requirements" [Ref. 34:p. 5], while Fincher includes "assessment of the threat, determining strategy or approaches for countering the threats and identifying the capabilities (manpower, money and systems) required to support the different strategies or approaches." [Ref. 35:pp. 4-5]

National defense policy is built around a strategic concept crucial to national survival. Hitch and McKean have observed that every type of war is fought in a strategic context, "at a certain time and place, with certain enemies and allies, to achieve certain political objectives." [Ref. 36:pp. 189-190] To solve the strategic problem, a document

is developed in DOD called Defense Guidance. The Defense Guidance document contains threat assessment, policy guidance, and strategy guidance, and is the culminating step in planning activities. [Ref. 37:p. 21] Strategic planning would be of considerable importance in preparing to counter a goal stated by Breshnev: "capture the two great treasure houses of the Western world, Persian Gulf oil and the mineral wealth of Southern Africa." [Ref. 38:pp. 18-19]

The high economic and political stakes in countering threats to national survival lead to an obvious conclusion: "planning is a big element in the process of an organization." [Ref. 39:p. 17] The Planning Phase covers mid-term of the Five Year Defense Plan (FYDP) plus a ten year extended planning period called long-term. [Ref. 40:p. 3] While a statement of work and the product design are the basis of a program-manufacturing plan [Ref. 41:p. 4-8], planning for the security of the United States starts with an assessment of the threat and culminates with the forecast of force objectives to assure security. [Ref. 42:p. II-13]

There are two important documents produced in the Planning Phase: the Joint Strategic Planning Document and the Defense Guidance. The Joint Strategic Planning Document (JSPD) is the "consolidated service input to OSD (Office of Secretary of Defense) planning. . . composed by the JCS (Joint Chiefs of Staff) from service inputs." [Ref. 43:p. 5]

The Defense Guidance is "the end product of the planning phase and services as the OSD guidance document for the programming phase." [Ref. 44:p. 5]

C. PROGRAMMING

Webster defines a program as:

a brief outline or explanation of the order to be pursued or subjects embraced in a public exercise, performance, or entertainment; a plan of procedure; a schedule or system under which action may be taken toward a desired goal: a proposed project or scheme. [Ref. 45:p. 1812]

Programming has been defined by several authors, all of whom agree that this process follows planning. Mosher interprets planning as conceiving goals and alternatives for future action, and programming as the reduction of alternatives to an approved course of action, the program. [Ref. 46:p. 48] Novick believes that programming involves translating preferred alternatives into forces, manpower, and dollar costs projected over a five-year period [Ref. 47:p. 2] or "the more specific determination of the manpower, material, and facilities necessary for accomplishing a program." [Ref. 48: p. 2]

DOD has more specific considerations in the programming phase. Clark and Legere identify the "perennially central question of Defense Department programming: How much is enough - i.e., what amounts of what kinds of defense (not how much army or navy or air force) are we buying?" [Ref.

49:p. 185] Evans states that programming is a process of translating objectives identified during planning into time-phased resource requirements [Ref. 50:p. 5], while Bumgardner believes the Programming Phase "balances the proper mix of forces, munitions, training, facilities, communications systems and support against available funding." [Ref. 51:p. 6] Fincher believes that programming involves translating the general plan approved in the Planning Phase into specific weapon system programs, including system description and funding estimates. He also identifies three efforts during the programming phase:

1. Preparation of the Service Program Objective Memorandum (POM). This is the service (Army, Navy, or Air Force) FYDP.
2. Preparation of a recommended service input for the President's annual fiscal year budget.
3. The Program Decision Memorandum (PDM) process involving the service secretaries and the Office of the Secretary of Defense (OSD). [Ref. 52:p. 5]

Programs can be reduced to very small components. Kramer believes that all programs in the federal government can be broken down into distinct elements and put together to contribute to larger programs. He states that each agency's mission consists of several program categories; the submissions would then be program subcategories, and the program subcategories are made up of program elements. [Ref. 53:pp. 38-39]

The POM is each service's response to the Defense Guidance which resulted from the Planning Phase. A POM is a prioritized list of requested programs which takes into account fiscal constraints, reasons for deviations from the FYDP, and assessment of differences between planning ideals and the realities of resource availability. [Ref. 54:p. 6]

D. BUDGETING

Webster defines a budget as:

a statement of the financial position of a sovereign body for a definite period of time based on detailed estimates of planned or expected expenditure during the period and proposals for financing them. [Ref. 55:p. 290]

There are several interpretations of budgeting. Evans considers budgeting as "the process of transferring required resources into defense spending requests" [Ref. 56:p. 5], while Fincher believes budgeting involves the definition, approval, and execution of the service budget. [Ref. 57:p. 5]

Rovitch and Gaskie identify four essential steps in budget construction:

1. Define what is to be achieved (the Goal).
2. Define the ways and the timetable by which it is to be achieved (the Plan and Program).
3. Determine the costs for each step to be taken (the Budget).

4. Devise a yardstick to measure whether the goal is actually being achieved through the budgeted program (the Performance Measure). [Ref. 58:p. 11]

Of these four steps, the Planning Process in DOD is most concerned with Steps 1 and 2. Step 3 is dependent upon the assets Congress is willing to provide.

As with other phases of PPBS, budgeting is a process which is defined differently by each author. Budgeting, as identified by Mosher, "lays an emphasis upon the idea of balancing: of proposed activities with their probable costs; and of competing activities among each other, in relation to the costs of each other." [Ref. 59:p. 48] Dawson expresses budgeting as "a device whereby the same phenomena and the same ideas are progressively translated into differing levels of meaning." [Ref. 60:p. 2] Bumgardner, however, states that the budgeting phase of PPBS, establishes the final costs for DOD in the President's Budget. He identifies the main components of the Budgeting Phase as budget estimate submissions, budget issues, and program budget decisions. [Ref. 61:p. 7] Although budgeting is defined in many different ways it has one item of concern: cost. Therefore, Budgeting can be considered an attempt to achieve a goal most efficiently at the given cost.

E. SUMMARY

PPBS is the budgeting process used in DOD. Identification of national priorities are established by the President.

The Planning Phase identifies threats to national security, proposes counters to these threats, and establishes priorities. The Programming Phase identifies a course of action among the program proposals from the Planning Phase. The Budgeting Phase establishes the final cost of the program.

The PPBS process is a link between military plans and requirements and the national economy because the process "represents a fusion - and often a compromise - of military policy objectives, strategy, and the means of implementing them and a relationship of these factors to other areas of national policy and operation." [Ref. 62:p. 77]

III. HISTORY

A. GENERAL

Military planning has always been an important consideration in national defense. The importance of planning has "been traced to the earliest armies in recorded history." [Ref. 63:p. 50] This chapter will explain the evolution of planning in the United States defense organization.

A budget process did not exist in the United States until 1921. Kramer notes that it is difficult to believe large governments could operate without guidance or coordination from a central budgeting officer. He points out that the Budget and Accounting Act of 1920 did establish a central budgeting officer in 1921. [Ref. 64:p. 10]

The federal government has become deeply involved in the national economy following the stock market crash in 1929. Dawson has pointed to the increased role of the federal government in fine-tuning the economy since World War II. In particular, he cited the Legislative Reorganization Act in 1946 as a turning point: "since 1946, the macroeconomic aspects of the budget have been predominantly a Presidential product." [Ref. 65:p. 6] As will be shown later in this chapter, the Planning Phase of PPBS has become more centralized, from wartime experiences and economic necessity.

This chapter will cover the following time periods: pre World War I, World War I, and 1945 to the present.

B. PRE-WORLD WAR I

The United States did not devote many assets to the national defense until it became involved in World War I. Yoshpe interprets the experience of economic planning in the United States with the frontier style self-sufficiency until the enormity of full scale war compelled regimentation of the economy. As Yoshpe observed, "military needs changed from month to month, and then changes required adjustments reaching deep into the industrial life." [Ref. 66:p. 26] For the first time there was a requirement for central planning of military requirements with national economy. The War Industries Board (WIB) was established to ensure coordination of resources through analysis of data, "altering and restraining the demands of the Government, the Allies, and the public." [Ref. 67:p. 27]

Economic expansion of the United States following the Civil War was made with little consideration for national defense. "Before World War I, no plans for the use of industry in a major war had been drawn up." [Ref. 68:p. 4] During the War, centralized planning was employed for the first time. Additionally, income taxes became a permanent

part of the American landscape and "improved the productivity of the national revenue system." [Ref. 69:p. 59]

Planning for war during peacetime became standard practice after World War I. "Before World War II, in the 1920's and 1930's, much planning took place in respect to military procurement, economic controls, and control agencies." [Ref. 70:p. 4] Mosher noted significant strides in organizing and developing strategic and mobilization plans, in particular the establishment of a War Plans Division and the Joint Army and Navy Board. [Ref. 71:p. 52]

All the plans developed prior to World War II were inadequate. In addition to the political uncertainties and international realities, Mosher also adds "organizational uncertainty, lack of clear-cut responsibilities and relationships in the difficult task of converting a peaceful nation to a military nation." [Ref. 72:p. 53]

C. WORLD WAR II

Long-range planning is far more difficult than short-range planning because long-range planning must consider social and scientific evolution and changes in mass psychology, while short-range planning does not. [Ref. 73:p. 22] Williams cited the decades of planning that pre-dated World War I (long-range) with the cross-channel invasion in 1944 (short-range) as examples of the planning problem.

Another important consideration in planning during World War II was the immense scientific advances made due to mobilization of the nation, which in turn "stimulates men to bring to fruition many unfinished projects and to conceive, under pressure of fear for the national safety, bold new ideas." [Ref. 74:p. 39] Financial returns are irrelevant during such times, which permit great strides in technology. One of the best examples of scientific breakthrough is the development of the atomic bomb.

Prior to World War II, the budget and planning channels were kept separate. Budgeting was a tool of the civilian leadership while the military leadership was responsible for planning. "World War II altered the situation basically in that the budgeting of dollars ceased to be a significant factor of control or planning." [Ref. 75:p. 56]

The Planning done during World War II can best be described by the Army's example:

As the strategic planning staff for General Marshall in his capacity as both Chief of Staff of the Army and member of the JCS (Joint Chiefs of Staff) and the CCS (Combined Chiefs of Staff), OPD (Operations Division) helped lay down the foundations of strategy and military policy which, once approved by the Chief of Staff or the JCS or the CCS, provided a frame of reference for the guidance of Army activities both in the theaters of operation and in the zone of interior. [Ref. 76:p. 28]

Since money was not an obstacle in resource planning, the planning made during World War II was done with military considerations foremost. Two significant outcomes of this

were organization of the Joint Chiefs of Staff and establishment of unified commands. [Ref. 77:p. 48]

D. 1945-PRESENT

A Department of National Defense was first proposed by President Truman in 1945. [Ref. 78:p. 48] Truman hoped to unify military strategy, program and budget. The Army's proposed unification plan, which was called the Collins Plan, called for a common supply system for three services (air, sea, land). The Navy called for continuance of existing structure, with formation of a National Security Council, a National Resources Planning Board, a Joint Chiefs of Staff, and a Military Munitions Board. The end result was the National Security Act of 1947, which created a Secretary of Defense. [Ref. 79:p. 88] An amendment to the act in 1949 created the Department of Defense. [Ref. 80:p. 174]

DOD has evolved into three separate services (Army, Navy, Air Force) headed by a Secretary of Defense. [Ref. 81:p. 49] However, Mosher emphasized four positive aspects of the National Security Act:

1. Planning and budgeting have become centralized.
2. Correlation and integration of planning and programming processes are now common.
3. Planning procedures are tailored to requirements of the budget cycle. Budget is a dominant concern of central military staffs.

4. Larger organization created by this process makes programming and budgeting processes more complex. [Ref. 82:pp. 57-58]

In 1953 and 1958 amendments to the National Security Act shifted authority and responsibility to the Secretary of Defense and collective Joint Chiefs of Staff and away from the separate services. Additionally, the service departments were confined to administrative, training, and logistical functions. [Ref. 83:p. 175]

Planning during this time frame evolved from a top-down approach. The Joint Chiefs of Staff divide plans into long-range, short-range, and medium-range plans. The services then take these plans and launch their own internal planning activities. Plans are best summarized by Mosher:

1. Long-range plans are projected annually a number of years in advance, and are useful and necessary especially for guidance of research and development activities.
2. Short-range plans are prepared annually and are designed to guide current operations and to provide immediate plans in the event of emergency. These plans are based on currently available resources (unlike long-range plans).
3. Medium-range plans are designed to translate national policy into strategy and objectives that are considered to be attainable. These plans are midway between long- and short-range plans in both time covered and planning approach. Medium-range plans are most important from a budget standpoint because they provide the logic for most programming of services, for the preparation of the annual budget, and for mobilization planning. [Ref. 84: p. 62]

Mosher has identified several planning difficulties:

1. The distance in time between development of the plan and the period it applies.
2. The tremendous complexity of the system.
3. Divorce between military planning and budgetary planning. [Ref. 85:p. 63]

The budget process identified by Mosher applied until 1961 when PPBS was introduced in DOD. Mosher holds that the budget process previous to 1961 was a system of communications which followed four sequential steps of objectives, plans, authorization of means, and operations. The sequential movement of the budget is characterized by coordination, consolidation, and generalization in upward flow (bottom-up) and by interpretation and specification in downward flow (top-down). [Ref. 86:p. 133]

PPBS imposed on DOD makes the budget system into an evolving process. Clark and Legere believe that the "McNamara Revolution" in DOD is the result of evolution from a process which started in the 1940's. McNamara wanted to introduce new analytic techniques to replace the traditional, mainly verbal-philosophical methods of the past and create a strong staff within the Secretary of Defense Office which could exercise those techniques. The results were PPBS and the Office of Systems Analysis (SA). [Ref. 87:p. 176]

E. SUMMARY

The Spanish-American War disclosed glaring deficiencies in the American military, particularly in the area of military planning and direction. A general staff was authorized by Congress on 15 August 1903 to correct that deficiency. However, the bureaus (ordnance, signal corps, engineers, etc.) resisted the changes. This resistance was supported by Congress, so a general staff never evolved. [Ref. 88:p. 16]

The budget process evolved through two World Wars and a major organizational change in 1947. The logical outcome which was foreseen by Mosher was PPBS.

Vision and balance are perhaps the two most necessary skills of the art of governing.

Vision is the ability to look beyond today's practice - which is usually founded on yesterdays problems; and to see what kind of tomorrow is likely or possible, and to think about what to do about that.

Balance is the capability of continuing to nurture those established programs which have a continuing claim on the public purse because they meet a continuing need, while fostering those new programs whose claim is that they can keep the present bearable while aiming at making the future brighter. [Ref. 89:p. v]

Good planning is the key to a successful budget process. Additionally, as Euske observed, "a process needs to be created ahead of time so that when the unexpected occurs, a means exists for adjusting to the situation." [Ref. 90:p. 18]

From the President's Commission on Economy and Efficiency (1909-12), which embraced the need for a national budget, [Ref. 91:p. 4] we have seen the evolution of the Defense budget process to its present form.

IV. THE JOINT CHIEFS OF STAFF (JCS)

A. BACKGROUND

The Joint Chiefs of Staff (JCS) are subject to the authority and direction of the President and Secretary of Defense. Subject to that authority, the JCS shall:

1. Prepare strategic plans and provide for the strategic direction of the armed forces.
2. Prepare joint logistic plans and assign logistic responsibilities to the armed forces in accordance with those plans.
3. Establish unified commands in strategic areas.
4. Review the major material and personnel requirements of the armed forces in accordance with strategic and logistic plans.
5. Formulate policies for the joint training of the armed forces.
6. Formulate policies for coordinating the military education of members of the armed forces.
7. Provide for representation of the United States on the Military Staff Committee of the United Nations in accordance with the Charter of the United Nations.
8. perform such other duties as the President or the Secretary of Defense may prescribe. [Ref. 92:pp. 263-264]

Collins believes that the foremost function performed by the Joint Chiefs of Staff (JCS) is the preparation of strategic plans and strategic direction of the armed forces. [Ref. 93:p. 49] Included in this function is the Planning Phase of PPBS.

The membership of the Joint Chiefs of Staff is composed of the Chairmen of the Joint Chiefs of Staff; the Chief of Staff, U. S. Army; the Chief of Naval Operations; the Chief of Staff, U.S. Air Force; and the Commandant of the Marine Corps. [Ref. 94:p. 332] Ries quoted Huntington concerning the JCS in drawing attention to the fact that the JCS was Born to power in wartime and antedating all other central defense institutions by six years with Congressional passage of the National Security Act of 1947. [Ref. 95:p. 100]

Clark and Legere see the JCS as fulfilling four roles:

1. Principal military advisor to the President, the Secretary of Defense, and the National Security Council.
2. To serve as the military operational staff for the Secretary of Defense (staff link in the chair between the Secretary of Defense and specified commands).
3. Planning and programming the military forces and material it believes will be required in the future, given the policy objectives of the nation.
4. Individual roles as the nation's senior soldier, sailor and airman, each responsible to the secretary of his particular service. [Ref. 96:pp. 180-181]

Of primary concern is role 3, as this role contributes to the military budget. Clark and Legere also observed that the Chairman of the Joint Chiefs of Staff (CJCS) has several responsibilities, principally as spokesman for the JCS. He is one among equals within the JCS, with little authority derived from statutes and directives. [Ref. 97:p. 182] President Reagan, as reported in the New York Times, in an

attempt to improve communications between the Secretary of Defense and field commanders directed that these commanders report directly to the chairman of the JCS rather than filter through the Joint Chiefs of Staff. [Ref. 98:p. A18] There are several movements within Congress to modify the JCS and strengthen the role of Chairman, however revisions to the National Security Act of 1947, and in particular the function of JCS are not new -- two major revisions occurred during the 1950's. [Ref. 99:p. 179]

One question of this thesis is how much do the JCS participate in PPBS, in particular the Planning Phase. The observation that the budget does not give us within the desired time the strength necessary for national security is the same now as it was thirty years ago. [Ref. 100:p. 28] The JCS must still strive with limited resources to achieve national security. Planning is a key phase toward attaining that goal.

B. DEFENSE GUIDANCE

The PPBS cycle has evolved over the past quarter-century at the direction of Congress. Beckstead observed that the PPBS cycle for a given fiscal year begins in late summer, two years before the beginning of that fiscal year. The planning phase is part of the FYDP, even though focus is on a given fiscal year. [Ref. 101:p. 20] The FYDP is formulated

annually, based on the Secretary of Defense's response to the Program Objective Memorandum (POM) submitted by military departments. The FYDP projects force requirements for eight years and manpower cost data for five years. [Ref. 102:p. 1-2]

The Defense Guidance "provides the centralized framework for the planning process." [Ref. 103:p. 21] Beckstead notes that this document consists of three major elements: threat assessment, policy guidance, and strategy guidance. Published in January, the Defense Guidance is the authority for directing defense policy, strategy, force, resource planning, and fiscal guidance. [Ref. 104:p. 21] Inputs to the Defense Guidance come from DOD components. These inputs include the Joint Strategic Planning Document (JSPD), Threat Assessment, Policy, Strategy, and Force Planning Guidance. The Defense Resources Board reviews comments from DOD components and drafts a recommendation to match strategy capabilities with threat for the Secretary of Defense's review and approval. [Ref. 105:p. 21]

The Defense Guidance is published in January. It causes a transition from the planning to the Programming Phase. Each military department and defense agency prepares and submits POM to the Secretary of Defense based on the policy and fiscal recommendation of Defense Guidance. [Ref. 106:p. 22] The JCS submit a Joint Program Assessment Memorandum

(JPAM), which is a risk assessment of the POM (defense capabilities within funding constraints), to the Secretary of Defense shortly after POM submission. [Ref. 107:p. 12] Secretary Brown confirmed that the JPAM was "an important factor in determining my recommendations to the President on the Service programs." [Ref. 108:p. 4]

General Taylor, in testimony before Congress, confirmed Secretary of Defense McNamara's assertion that a Chief has the right to appeal to Congress or the President on behalf of his service. He stated that the JCS advised not only the Secretary of Defense but also the National Security Council and the President, which made it clear that the JCS has the right to direct approach to the President. [Ref. 109:p. 59] This right of appeal has certainly been confirmed by a recent publication in the New York Times which disagreed with President Reagan's assertion concerning Soviet cheating on arms control. The JCS assert that the Soviets are in compliance with the requirements of the Strategic Arms Limitation Treaty (SALT II), while the President reports the Soviets have exceeded the treaty limits. This article implies that either the JCS is incorrect or the intelligence agency which gave the President his data is in error.[Ref. 110:p. 6]

C. JOINT STRATEGIC PLANNING SYSTEM (JSPS)

Planning involves a continual review of objectives and the means for their attainment. The preferred alternative will remain that way only if information continues to support that alternative above its competition. [Ref. 111:p. 12]

With that broad guidance, Secretary Weinberger set forth the basic aims of the Defense Guidance:

1. Prevent the coercion of the United States, its allies and friends.
2. Be capable of protecting U. S. interests and U. S. citizens abroad.
3. Maintain access to critical resources around the globe, including petroleum.
4. Oppose the geographic expansion of Soviet control and military presence world-wide, particularly where such presence threatens our geo-strategic position.
5. Encourage long-term political and military changes within the Soviet empire that will facilitate building a more peaceful and secure world order. [Ref. 112:p. 19]

A DOD directive stated the focus of the Planning Phase will be on the following objectives:

1. Define the national military strategy necessary to help maintain national security and support U. S. foreign policy 2 to 7 years in the future.
2. Plan the integrated and balanced military forces necessary to accomplish that strategy.
3. Ensure the necessary framework (including priorities) to manage DOD resources effectively for successful mission accomplishment consistent within national resources limitations;

4. Provide decision options to the Secretary of Defense to help him assess the role of national defense in the formulation of national security policy and related decisions. [Ref. 113:p. 2]

The Joint Long Range Strategic Appraisal (JLRSA), the Joint Strategic Planning Document (JSPD), and the Military Department's Long Range Plans are the fundamental documents in the Planning Phase and represent independent strategy, advice, and recommendations by the Joint Chiefs of Staff and Military Departments to the Defense Guidance for mid-term and long-term. [Ref. 114:pp. 3-4]

The fundamental Planning Phase documents combine to form a Joint Strategic Planning System. Bischoff believes the Joint Strategic Planning System (JSPS) is the primary vehicle for developing military advice and introducing it into the DOD PPBS. He defines JSPS as a "conceptual aggregation of specific strategic planning documents developed over time to fulfill the statutory responsibilities of the JCS by providing military advice to the President and the Secretary of Defense." [Ref. 115:p. 7]

The plans developed within DOD normally do not project beyond twenty years into the future. "The JCS develops and keeps up to date three separate plans-- long-range (11-20 years), mid-range (3-10 years) and short-range (less than 2 years)." [Ref. 116:p. 58] These plans include "minimum risk force" (which is fully structural, supported and manned

force required to achieve national military objectives with minimum risk) and "planning force" (which has prioritized missions, duplicate threats eliminated, force employed in sequenced to carry out strategy at increased level of risk while retaining reasonable insurance of success). The "minimum risk force" is fiscally unconstrained while the "planning force" is the one contained in the Joint Strategic Planning Document (JSPD) [Ref. 117:p. 7]

The Joint Chiefs of Staff (JCS) promulgate several documents as a planning framework. Fincher believes the JCS are charged with planning responsibilities which are discharged by promulgation of seven documents represented in three areas: strategy, intelligence, and research and development. [Ref. 118:p. 79] "The JCS established the Joint Strategic Planning System (JSPS) in 1952 to serve as a framework for developing military advice on resource allocation considerations and converting national security policy into strategic guidance." [Ref. 119:p. 16] The Navy Programming Manual identifies the seven studies and plans prepared by the JCS as follows:

1. Joint Intelligence Estimate for Planning (JIEP).

Describes situations and developments throughout the world that could affect U. S. security interests in the short and mid-range periods (present- 10 years).

2. Intelligence Priorities for Strategic Planning (IPSP).

Establishes comprehensive military intelligence subjects, targets and priorities for the short and mid-range period. (present - 10 years).

3. Joint Long-Range Estimative Intelligence Document (JLREID).

Summarizes factors and trends in world power relationships and assesses the capabilities of important foreign nations. (Covers long-range period, 11-20 years).

4. Joint Long-Range Strategic Studies (JLRSS).

Source document delineating JCS concepts concerning role of U.S. Military power in long-range period as well as outlining broad strategic implications which should be considered in studies, estimates, appraisals, policies, plans, and R&D objectives. (Covers long-range period, 11-20 years.)

5. Joint Long-Range Strategic Appraisal (JLRSA).

Consolidate estimative intelligence, U.S. strategic forecasts, broad force structuring implications and probable issues. (Covers long-range period, 11-20 years.)

6. Joint Strategic Planning Document (JSPD)

Provides the advice of the Joint Chiefs of Staff to the President, National Security Council, and the Secretary of Defense on the military strategy and force structure required to attain the national security objectives of the United States. (Covers mid-range period, 3-10 years.)

7. Joint Strategic Capabilities Plan JSCP).

Provides guidance to the Commanders of the Unified and Specified Commands and the Service Chiefs for the accomplishment of military tasks, based on military capabilities, conditions, and programmed force levels. Allocates the programmed forces to the Unified and Specified Commanders for planning purposes based on the case scenarios in the current CG (Consolidated Guidance). (Covers short-range period, present-2 years.) [Ref. 120:pp. II-1-II-3]

The document of most concern in the defense budget process is the JSPD because it is directed to high level decision makers and covers a critical time period for weapon system acquisition. According to Bischoff, the JSPD is the one designed to influence development of Defense Guidance, and thus most greatly impacts the planning phase. [Ref. 121:p. 7] The JSPD is derived from the JSPD Supporting Analysis (JSPDSA), which is an internal JCS document which provides the basis for JSPD and establishes the JCS position on national security matters. [Ref. 122:p. II-8]

Part I of the JSPDSA includes military strategy, planning guidance for development of planning force levels, and specific guidance for scope, format, phasing and forwarding of input into Part II. Part II will develop required planning force and support levels for strategic, general purpose, and allied and friendly forces. [Ref. 123:p. II-8]

From the Defense Guidance that evolves from the planning phase, a POM is prepared. This POM represents proposals on programs for forces, manpower, equipment and logistic support to meet the objectives in the Defense Guidance. [Ref. 124:p. 7] The Joint Strategic Planning System (JSPS) is therefore critical to the military process.

D. SUMMARY

There are many critics and criticisms of the Defense Budget. "Military departments have been encouraged to 'build

up a case' for what they think they may need rather than to work from what they reasonably expect they may be granted." [Ref. 125:pp. 45-46] Although these words are meant as a criticism, the Planning Phase of PPBS is more concerned with the threat to the nation and resources needed to counter that threat than the cost.

The Planning Phase of PPBS is a major concern of the JCS. "Planning starts with the assessment of the threat to the United States and culminates with the forecast of force objectives to assure that security." [Ref. 126:p. II-13] The seven planning documents that make up the JSPS. The JSPD is drafted by the Joint Chiefs of Staff (JCS) and used to influence development of Defense Guidance in the Office of Secretary of Defense. [Ref. 127:p. 7]. Additionally, the planning phase of the PPBS annual cycle is initiated with submission of the JSPD by the JCS. [Ref. 128: p. II-1]

The Defense Guidance provides a transition from planning to programming and is the annual statement of the Secretary of Defense concerning policy, strategy, force structure and fiscal planning guidance from which Military Services and Defense Agencies prepare the POM which is a key document in the programming phase in PPBS. [Ref. 129:p. 7] The Joint Chiefs of Staff (JCS) thus play a key role in developing a budget for defense of the nation.

V. THE NATIONAL SECURITY COUNCIL (NSC)

A. BACKGROUND

The National Security Council (NSC) was created by the National Security Act of 1947. [Ref. 130:p. 30] It is the President's "principal office within the White House Staff for national security policies and objectives is the National Security Council." [Ref. 131:p. 2-3] There are four members of the NSC. They are the President (who serves as Chairman), the Vice President, the Secretary of State, and the Secretary of Defense. [Ref. 132:p. 614] The two duties assigned the NSC in 1947 were:

1. Recommend action in actual and potential United States military power, based on objectives, commitments, and risks.
2. Recommend action on matters of common interest to federal activities concerned with national security. [Ref. 133:p. 89]

Daily tasks of the NSC staff are supervised by the President's Assistant for National Security Affairs. [Ref. 134:p. 26] "The characteristics, goals, and tempo of national readiness planning stem from considerations of high policy evolved from deliberations of this council," the source of national security policy guidance in the President. [Ref. 135:p. 2]

As with many organizations in the executive branch, the NSC can be used as the President sees fit. "Because each President has used the NSC in his own way, its actual role and responsibilities have varied widely." [Ref. 136:p. 5] Odean identified the following roles played by the assistant to the President for national security affairs and his staff:

1. Personal staff to the President.
2. Policy development.
3. Decision-forcing process.
4. Managing the decision process.
5. Overseeing the implementation of policies. [Ref. 137:pp. 5-6]

Of primary concern in the Planning Phase of PPBS is policy development, for from these policies the national priorities are established. These priorities are essential to the Planning process.

National policy is rarely developed at the spur of the moment. Clark and Legere identified six questions that arise in determining national policy:

1. What implications do major domestic and international trends have for national security policy arrangements?
2. What are the merits of the main alternatives for centering policy responsibility and initiative in the White House, the State Department, or other institution?

3. What should be the functions of the White House staff and its relations with the departments and agencies, including the Bureau of the Budget and the intelligence community?
4. How are major defense questions affected by the relations of the civilian leaders with the professional military in DOD?
5. What are the relative advantages of a comprehensive codification of national security policy versus ad hoc guidance?
6. What is the best way to assure performance and follow-through? [Ref. 138:p. 11]

B. EVOLUTION

The President is responsible for establishing national security policy. [Ref. 139:p. 10] "A clear statement of purpose universally understood is the outstanding guarantee of effective administration," or "the mission must be defined." [Ref. 140:p. 35] Establishing a clear mission is one of the tasks of the National Security Council. Yoshpe stated that the National Security Council achieves three things:

1. Periodically appraises the Nation's foreign risks, commitments, military strengths, and domestic economic capabilities.
2. Endeavors to strike a proper balance among those items in #1.
3. Provides the medium for basic assumptions and national policy objectives on which military strategic and resources mobilization planning is founded. [Ref. 141:p. 2]

All the achievements are critical for providing direction in the Planning Phase of PPBS.

To make sound decisions, the President must have accurate information concerning the problems confronting him. Clark and Legere noted that the President will always be faced with the following problems: acquiring information, identifying issues, making decisions, coordinating, and assuring performance. [Ref. 142:pp. 56-57] They also described the use of the NSC by four Presidents: President Truman (1947-1953) used the NSC strictly in an advisory nature; President Eisenhower (1953-1961) used the NSC as a central vehicle for formulating and promulgating policy and a primary means of imparting presidential direction and coherence to departments and agencies; President Kennedy (1961-1963) used the NSC as a Presidential staff to manage issues identified by him; and President Johnson (1963-1969) used the NSC as a method of tight control over items that were of interest to him. The staff became a selective intelligence processor, but since the President wanted "open options," no guidance restricted agency operations and planning.[Ref. 143: pp. 58,60,70,82]

President Reagan has used the NSC as a crisis manager. For example, the President called a meeting of the NSC to discuss responses to the Russian downing of a Korean Airliner [Ref. 144:p. 7] and Admiral Poindexter was instrumental in planning the capture of the Achille Lauro hijackers [Ref. 145:p. A14].

The concerns of Congress with the NSC and the budget process were best expressed in 1961: "NSC deliberations should be related more closely to the budget process and in particular that the perspectives of the secretaries of state and defense are brought to bear on an ordering of national priorities at the target-setting stage of the annual budget preparation." [Ref. 146:p. 107]

C. BUDGET

Within the executive branch of the federal government, decisions affecting national security objectives, strategy, policy, and force employment are made in two principal forums: the National Security Council (NSC) system and the defense budget process. [Ref. 147:p. 64]

The National Security Council has an input in both processes. We know that requirements are based on plans. "The national objectives relating to defense are recommended to the President by the National Security Council." [Ref. 148:p. 58] The President will then determine "in broad terms the policies and objectives of American and foreign military programs." [Ref. 149:p. 59]

The Defense Reorganization Act of 1958 gave the Secretary of Defense, under the President and National Security Council, two distinct lines of authority: a direct line through the Joint Chiefs of Staff (JCS) to Unified and Specified Commands, and administrative control of departments through the Service Secretaries. [Ref. 150:p. I-1] The Navy Programming Manual notes the importance of the NSC

upon the Planning Phase of PPBS, and states that the purpose of the NSC "involves the security policy of the U.S." [Ref. 151:p. II-1]

The JSPD evolves from the Joint Intelligence Estimate for Planning (JIEP), which combined with the national policy and other JCS planning documents give us the Joint Strategic Planning System. Without the establishment of a security policy by the NSC, resource assets would be expended to cover unlikely threats to the national security. So determination of the military program is based largely on the advice of the National Security Council and particularly the Secretary of Defense [Ref. 152:p. 79]

There are innumerable examples of the intricate steps involved in budget formulation. Yoshpe cited the example of foreign aid as a good illustration of the budget process: guidance by the President and NSC; coordination by Department of State and DOD; drafting programs by countries; consolidating countries by region; Bureau of the Budget and Congressional action; allocation of appropriated funds; and determination of firm requirements and program execution. [Ref. 153:p. 20]

The NSC also conducts an analysis of the POM from the Secretary of Defense. Although this process is considered part of the Programming Phase, the analysis centers upon how the POM:

1. Relates to Defense Guidance (outcome of the planning phase).
2. Provides balance among force structure, modernization, and readiness.
3. Demonstrates trade-offs. [Ref. 154:p. 22]

Thus, the POM could revert to a re-evaluation of the Planning Process if the NSC finds it deficient.

The size of the DOD budget and the interest in security of the nation causes Congress to focus attention on this department. Brundage made an interesting observation concerning the budgeting process:

Because of its size and paramount importance to the safety of the country, the Defense budget gets more top-level study, review, and discussion than any five other departmental budgets together." [Ref. 155:pp. 131-132]

He also noted that the NSC considered the defense budgets under Eisenhower, but during the Kennedy and Johnson administrations the defense budgets were taken up directly by the President. [Ref. 156:p. 132] Korb considers the NSC system as an "almost ideal civil-military balance" because the Chairman of the Joint Chiefs of Staff (JCS) is an advisor to the NSC and military services all have input to the analysis of interdepartmental and ad hoc groups, but all the groups were chaired and controlled by civilians. [Ref. 157:p. 66]

D. SUMMARY

The National Security Council(NSC) was intended to be the point where policy and administration were linked at the highest level. [Ref. 158:p. 93] In the case of the defense budget, the NSC is most definitely involved. The Chairman of the JCS is an advisor to the NSC and the Secretary of Defense is a member. The NSC advises the President on the integration of domestic, foreign, and military policies relating to national security. [Ref. 159:p. 35] Yoshpe notes that the development of a budget involves the entire national security structure of the federal government. He also notes "at the apex of this structure is the President." [Ref. 160:p. 2]

Gelb in an article for The New York Times notes that the NSC can sometimes give no policy at all when the Secretary of State and Secretary of Defense disagree.[Ref. 161:p. B10] He also points out that the NSC Staff members have a great deal of power because they are between the President and the Secretaries. They can add a cover memorandum over the Secretary memorandum, and write the decision directives for the President. [Ref. 162:p. A22]

Sponsorship of development and implementation of military plans begins with the President, next in line is the National Security Council, then the Joint Chiefs of Staff, and finally the individual Chiefs of Staff and the

Chief of Naval Operations. [Ref. 163:p. 59] The policies and objectives of American foreign and military programs are determined by the President upon advice from the NSC. Then JCS then determine force requirements, with review and approval of the President and NSC. [Ref. 164:p. 59]

Without the direction received from the NSC, there could be no plan upon which to base the JSPS, get a Defense Guidance, develop a POM, and as a consequence have a budget for national defense.

VI. OTHER CONTRIBUTORS TO PLANNING

A. GENERAL

The President promulgates a comprehensive national security policy, which forms the foundation for defense planning. [Ref. 165:p. 15] The NSC advises the President on integration of domestic, foreign, and military policies. In addition to the four statutory members of the NSC (the President, Vice President, Secretary of State, and Secretary of Defense), the Chairman of the Joint Chiefs of Staff, the Director of Central Intelligence, and other departments and agencies as required also sit in on the NSC meetings. [Ref. 166:p. 15]

There are no established guidelines or priorities to establish policy. However, there are no shortage of advice or advisors to the President in the formulation of policy. Clark and Legere believe the President needs to address the following questions when establishing policy:

1. Is the matter of truly national importance?
2. Does it involve the interests and responsibilities of several departments and agencies?
3. Does it by nature, lend itself (or require) advance planning and policy lead time, or is it a bridge to be crossed only on arrival?
4. It is a matter already well and satisfactorily understood in the federal government?

5. Does it involve reassessment or redirection of standing policies?
6. Is it a matter on which U. S. Policy can have an effect or should try to have an effect? [Ref. 167:p. 28]

The answers to all six questions will impact on the Planning Phase of PPBS.

The threat to national security is normally associated with foreign powers. Kertesz believes the following developments must be scrutinized in developing foreign policy:

1. NATO and the European Economic Community (EEC) must be on guard against the Soviet Union.
2. Strengthen defense capabilities and cooperation in the North Atlantic Area.
3. Communist are intensifying power grabs in under-developed countries
4. American foreign policy is influenced by domestic politics and economics in the United States. [Ref. 168: pp. 216-217]

To obtain information in order to conduct analysis and evaluation of the threat posed to the national security, the Central Intelligence Agency (CIA), the Defense Intelligence Agency (DIA), the Intelligence and Research Bureau (INR), and the National Security Agency (NSA) provide collection and assessment services to decision-making authority. To develop effective systems to counter threats evaluated from intelligence data, the Defense Resources Board (DRB) was chartered by the Secretary of Defense. The DRB presently

oversees the entire planning, programming, and budgeting process in the DOD. [Ref. 169:pp. 18-19]

Since the concern of this thesis is for the Planning Phase of the PPBS only the intelligence communities, the Defense Resources Board (DRB) and public opinion will be covered in the remainder of this chapter.

B. INTELLIGENCE AGENCIES

Lack of intelligence even in time of peace can have catastrophic results. Faulty assessments behind the United States failure at Pearl Harbor in 1941 are attributed, according to Hill, to the following:

1. Error in estimating the technical effectiveness and number of particular weapons available to the other side
2. Failure to fully appreciate the effectiveness of the other side's operational procedures.
3. Gauging the wider military implication of the capabilities being analyzed. [Ref. 170: pp. 173-174]

The Central Intelligence Agency (CIA) was founded under the National Security Act of 1947. The CIA duties under the National Security Act are:

1. To advise the National Security Council (NSC) concerning National security matters.
2. To make recommendations to the NSC.
3. To correlate and evaluate intelligence relating to national security and provide appropriate dissemination of such intelligence within the government.

4. To perform additional services of common concern as the NSA determines can be more efficiently accomplished centrally.
5. To perform such other functions and duties related to intelligence affecting national security as the NSC may direct. [Ref. 171:pp. 260-261]

The CIA is responsible for the gathering of intelligence on foreign powers. It is also the largest intelligence Agency in the United States. Collins observes that the Director of Central Intelligence (CD) develops overarching guidance, objectives and policies for the entire intelligence community and "prepares a consolidated National Foreign Intelligence Program budget, with advice from the program managers, departments, and agencies concerned, then presents it to the President and Congress." [Ref. 172:p. 117] He also notes that the intelligence community can function effectively only if customers keep it sufficiently informed in a timely fashion, and key intelligence figures are well enough informed about U.S. purposes, policies, plans, and programs to furnish proper support. [Ref. 173:p. 119]

The State Department Bureau of Intelligence and Research (INR) does not collect intelligence, but rather coordinates research on governments, business, commerce, cultures to underpin U. S. foreign policy. [Ref. 174:p. 115]

The Defense Intelligence Agency (DIA) was established in 1961 by Secretary McNamara to provide him and the Joint

Chiefs of Staff with a centralized source of intelligence.

[Ref. 175: p. 204] This intelligence agency is always headed by an active duty flag officer. The intelligence collected by the DIA is organized into four categories:

1. Basic intelligence concerns fundamental attributes of foreign forces, physical geography, and target information.
2. Current intelligence concentrates on time-sensitive matters that might have a major impact on America's military establishment.
3. Scientific and technological intelligence follow foreign progress in the field of weapons and equipment.
4. Estimates of strengths, weaknesses, and probable courses of future action for enemies, allies, and uncommitted countries, using imports from the first three categories.[Ref. 176:p. 116]

The Fleet Intelligence Support Activity, HUMINT, Technical Sensor Collection, Imagery Intelligence, ELINT Centers, Intelligence Production Activities, Scientific and technical intelligence, Intelligence Data Handling Systems, Management Headquarters (General Intelligence), Defense Special Security System, and Intelligence Communications all come under the General Defense Intelligence Program(GDIP), and thus under the auspices of the DIA. [Ref. 177:pp. N-1-2] Shribman's New York Times article concerning the Soviet downing of a Korean Air Lines Boeing 747 shows a glimpse of the vast, intricate data collection at 4,120 intercept stations around the globe. The data collected on the airline downing included Soviet pilot to ground communications,

radar emissions, and the sequencing of the engagement, arming, and firing of the missile. This glimpse also tells intelligence analysts the Soviet command and control, what needs to be done to counter, what resources are required, and subsequently what must be included in the defense budget. [Ref. 178:p. A7]

The National Security Agency (NSA) is almost as old as the CIA, having been operating since 1951. This agency performs two unique services:

1. The interception, traffic analysis, and crypt-analysis of electronically transmitted messages provides otherwise unavailable insights into the plans, operations, and procedures of friend and foe alike.
2. Regulates, supervises, and integrates cryptosecurity activities of those U. S. Armed Forces and governmental bodies that need to communicate covertly.
[Ref. 179:p. 116]

NSA directs the Consolidated Cryptologic Program (CCP), thus controlling Cryptologic Activities, Cryptologic Communications, and Management Headquarters (Cryptologic). [Ref. 180:p. N-1] This agency is "both supersecret and super-sensitive, is routinely ruled by an active duty military man with a civilian Deputy, who does double duty as the Agency's senior cryptographic expert." [Ref. 181:p. 124] This agency is obviously of great importance because it will be collecting data from the most sensitive of communication.

The Intelligence Priorities for Strategic Planning (IPSP) establishes military intelligence targets and

priorities for a ten year period. It provides guidance and advice to the Secretary of Defense and military services on planning, collection, and production of intelligence and informs the Director of the CIA of intelligence priorities to support military strategy. [Ref. 182:p. 47] The U.S. intelligence community attempts to promote cooperation to meet both national and departmental intelligence needs without excessive duplication of effort. [Ref. 183:p. 115]

C. DEFENSE RESOURCES BOARD

Throughout the history of the DOD there has been a need for direction and oversight of the DOD Planning Process.

"The DRB (Defense Resource Board) will have oversight responsibility for the planning process (of the DOD PPB System)." [Ref. 184:p. 3] This established the DRB as a key participant in the Planning Phase of the PPBS in the DOD.

The DRB was established in April 1979 to help improve the PPBS, primarily increasing efficiency by supervising OSD (Office of Secretary of Defense) review of Service POMs and the budget submissions. [Ref. 185:p. 6] "The primary role of the DRB is to help SECDEF (Secretary of Defense) manage the entire PPBS process." [Ref. 186:p. E9.5.1] Membership of the Defense Resources Board (DRB) consists of: Deputy Secretary of Defense (Chairman); Chairman of the Joint Chiefs of Staff; Secretary of the Navy; Secretary of

the Air Force; Under Secretaries of Defense for; Policy, Research and Engineering; Assistant Secretaries of Defense for: Comptroller, Health Affairs, International Security Affairs, International Security Policy, Manpower, Reserve Affairs and Logistics; Director, Program Analysis and Evaluation; and Associate Director, Office of Management and Budget. [Ref. 187:p. 3-10]

The DRB receives a draft of the Threat Assessment, Policy, Strategy, and Force Planning Guidance which identify major changes and issues raised in submission by POD Components. The result of meetings with the DRB is a draft of Defense for Plans. The DRB makes recommendations to the Secretary of Defense concerning "reduction of the strategy capabilities mismatching, the associated JCS - required force tables and risk assessment and any remaining unresolved problems or issues. [Ref. 188:p. 22]

The publication of the Defense Guidance completes the Planning Phase of PPBS. To ensure that the DRB is not overburdened during the Planning Phase, a Defense Guidance Steering Group (DGSG) resolves minor issues at lowest levels, bring only important issues to the DRB for resolution. This DGSG is composed of senior representatives of all the DRB members and chaired by the Deputy Under Secretary of Defense for Policy (DUSDP). It has

"representatives at the Deputy Assistant Secretary and Two-Star General Officer Level." [Ref. 189:p. 10]

The DRB accept personal appraisals of major issues from Commanders of Unified and Specified Commands as well as assessments of the Joint Chiefs of Staff (JCS) and Military Departments. [Ref. 190:p. 4] The DRB therefore carries out a very critical role in the Planning Phase of the PPBS in matching available resources to an evaluated threat.

D. PUBLIC OPINION

The federal government of the United States is a Republic. As such it represents the will or desire of a majority of its citizens. An outstanding discussion of public opinion is by Korb's observation that "one of the greatest paradoxes of the American political system is the fact that the public is not informed about national security issues, yet public support is necessary to carry out national strategy, particularly one that carries risk." [Ref. 191:p. 61] Korb believes that public opinion sets limits or boundaries on national strategy by setting limits on how much of their resources go to defense. [Ref. 192:p. 61] These limits of course impact the planning phase in the PPBS process, particularly the DRB and the Secretary of Defense in preparation of the Defense Guidance.

The national press is a major source of public opinion. Although it reports facts, included will be biases of the writer or news anchor, whether reporting surpluses due to deflation [Ref. 193:p. B9], deficiencies in combat readiness, [Ref. 194:pp. 1-2], or failure of weapon systems. [Ref. 195:pp. A1, A18] The interested public will be effected by the news reports, and will notify the people who count significantly in the Budget process Congress.

Euske stated that "the only way to plan for the unexpected is to have a process that is responsive to whatever the situation is." [Ref. 196:p. 18] Halloran stated in a newspaper article that the Armed Forces were cutting back troop strength in face of Congressional budget costs. [Ref. 197:p. A12] Planning also considered public, or Congressional reaction to media disclosures. Yet another example is local opposition to a National Guard base in Tennessee. Alternative plans are being considered if Congress does not approve the National Guard proposal. [Ref.198:p. A23]

Although not considered in assessing a threat, countering with resources, and writing into the Defense Guidance, public opinion is considered in the Planning Phase of PPBS in order to have alternative courses of action by priority.

E. SUMMARY

All the items discussed in this chapter have an influence on the Planning Phase of PPBS in DOD. The intelligence community is critical in determining not only the threat, but counters to the threat. The Defense Resources Board evaluates the Defense Guidance to ensure strategy and capabilities match. Public opinion must be considered to ensure final funding by Congress of the Defense Budget.

VII. CONCLUSIONS

A. PPBS

The size of the United States Defense Department can be shown with the following statement:

Defense acquisition is the largest business enterprise in the world. Annual purchases by the Department of Defense (DOD) total almost \$170 billion -- more than the combined purchases of General Motors, Exxon, and IBM combined. [Ref. 199:p. 3]

Because of the huge funds involved, and the average citizen's abhorrence of taxes, it is incumbent upon officials in DOD to plan carefully. Planning is crucial to the translation of broad national security goals and objectives into balanced programs. Planning is the weakest, least explicit phase of PPBS. [Ref. 200:p. 31] Schick defines planning in the context of budgeting as "the determination of objectives, the evaluation of alternative courses of action, and the authorization of selected programs." [Ref. 201:p. 2]

The Defense Budget process has been evolving along with the DOD organization since its founding in 1947. "The evolution of the defense budget process since the founding of the department in 1947 is characterized by a tension--inevitable and, in all likelihood, healthy--between centralization and decentralization." [Ref. 202:p. 570] Fox identified four weaknesses in the planning phase of PPBS prior to 1981: undisciplined planning, silent first P of

PPBS, inadequate input from the area commanders, and no link from planning to programming.[Ref. 203:p. 39]

Smithies observed that decentralization involves some delegation of decision-making authority, which inevitably involves some conflict in the point of view between central and lower level authorities, but may lead to better results. [Ref. 204:p. 1] Deputy Defense Secretary Carlucci promulgated two memorandums in March and April 1981 with a goal to improving procurement and the budget planning process. The major themes were: decentralization (strengthen the role of service Secretaries), cost control (hold down costs), strengthen the industrial base (facilitate defense industry planning). [Ref. 205:p. 76] Those policies are in effect today.

The threat of a future war has intensified the study of resource requirements. [Ref. 206:p. 53] Of particular concern is the need for careful planning. Dawson was correct when he predicted that PPBS would gain general viability, acceptability, and effectiveness around 1990, but only in DOD. The rest of the federal government has rejected his optimistic appraisal. [Ref. 207:p. 16] Because long-range planning deals with future events, it is difficult work. Forecasting even a few years into the future is an intellectual task so formidable, that only modest success is attained. [Ref. 208:p. 21] The Navy planning system at the

start of PPBS in 1961 considered long-range planning ten to twenty years in the future, and a mid-range plan from the present to ten years in the future. [Ref. 209:p. 4] To ensure planning and control of budgeting, the PPBS was officially initiated by Defense Secretary McNamara a quarter of a century ago. Mosher pre-dated McNamara by six years when he outlined four trends developing in the budget process:

1. The drive toward greater and greater organizational unification has had tremendous effect upon both planning and budgeting.
2. Notable progress in correlation and integration of planning and programming process, not only among organizations concerned, but also among substantive elements of planning content and among the terms of time covered by different plans and programs.
3. The role and importance of the budget in the total military picture is being transformed.
4. Magnification of the complexity of both the programming and budgeting process. [Ref. 210:pp. 57-58]

Little has changed from the trends noted three decades ago. The trend now is toward decentralization; the service secretaries have been granted more autonomy. PPBS had seven major goals:

1. Orient planning around major missions as a means of eliminating outdated and unrealistic interservice competition.
2. Relate resource inputs to military output in terms of dollars and physical units in order to establish a feasible schedule of military output.

3. Coordinate long-range planning with budgets so as to dovetail funding decisions with program decisions.
4. Provide a means of continuously appraising programs and eliminate as much as possible the negative effect of the annual budget cycle on the ability to respond to changing military needs.
5. Provide a timely system of progress reporting as a means of control.
6. Provide a routine capability for making cost-effectiveness studies of alternative force structure.
7. Develop an integrated OSD management system. [Ref. 211: p. 87]

The goals established twenty years ago have, on the whole, been achieved. The era of limited budgets may bring some changes in the future.

Governments are composed of people. The role of people in the U.S. federal government, particularly the executive branch, can be summarized as follows: the personality of the individuals, rather than the office per se, has determined the key actors in the different administrations.

The President is usually the key actor in the policy process. He sets the broad outline or the tone or the atmosphere in which the decisions are made. [Ref. 212:p. 70] The NSC exists to assist the President. It sets forth broad goals to ensure the security of the United States. It is assisted by several intelligence agencies, of which the Central Intelligence Agency (CIA) is the one which is primary advisor to the President and NSC on national foreign

intelligence. [Ref. 213:p. 116] The Chairman of the Joint Chiefs of Staff is also advised by the Defense Intelligence Agency (DIA) and National Security Agency (NSI).

To achieve any effective outcome, standards must be set. Collins identifies several standards, all of which must be met in order to ensure an effective product of defense planning: competent planners, team play, goal-oriented audience, a spectrum of options, a spectrum of plans, realistic resource allocation, timely output, and impartial inspection by professionals. [Ref. 214:pp. 9-12] "An ancient adage says geniuses should prepare defense plans that can be easily implemented by idiots (keep it simple)." [Ref. 215:p. 181] Additionally, Kingston-McCloughry notes "it is important that partisan approaches are avoided at the staff planning level." [Ref. 216:p. 100] The ultimate outcome is a JSPD promulgated by the JCS, which also initiates the planning phase in the PPBS annual cycle. [Ref. 217:p. II-1]

The JSPD contains military appraisal of the threat to U.S. interests and objectives world-wide, a statement of recommended military objectives derived from national objectives, and recommended military strategy to attain national objectives. [Ref. 218:p. 121] The DRB reviews the JSPD and makes recommendations to the Secretary of Defense, who subsequently promulgates the Defense Guidance. The Defense

Guidance ends the Planning Phase and begins the Programming Phase of the PPBS. [Ref. 219:p. 22]

B. THE JOINT CHIEFS OF STAFF

Presidents have appointed commissions with regularity to review ways of improving the government. One such commission reviewed the Joint Chiefs of Staff:

The Hoover Commission found much to criticize in the operations of the JCS. The chiefs were too remote from other parts of the defense establishment and they were "too detached from the vitally important political, economic, and scientific factors that must enter into all valid strategic plans." [Ref. 220:p. 131]

The pressure currently in Congress to revamp the JCS and give more authority to the Chairman of the JCS is a reflection of the above criticism. The Chairman of the JSC is currently a member of the DRB, sits in on the NSC meetings, and is the principal military advisor to the President and Secretary of Defense. The Chairman will soon receive reports directly from field commanders rather than filtered through the JCS. This change is by executive directive. [Ref. 221:p. A18] Additionally, the Chairman would also be required to develop an additional JSPD which details the priorities, and optimal combination of defense resources to meet expected budget limitations rather than relying on the Secretary of Defense Staff. [Ref. 222:p. 37]

The pressure in the national media is not all in favor of change. Bennett advises against changing the JCS because

inter-service cooperation will be undermined, not enhanced. Additionally he feels the JCS would become more removed as advisors to the President and Secretary of Defense. [Ref. 223:p. A23] Since there is no tradition of a General Staff in the United States, there is no individual qualified to serve as the Chairman of the Joint Chiefs in the capacity of unbiased service officer. Additionally, the Chairman of the JCS already serves on the DRB and the NSC. As Bennett observed, elevating a Service Chief will most likely be disruptive.

C. FUTURE CONSIDERATIONS

If everyone in the world thought alike or was a pacifist, there would be no need for a national defense force. "In a truly stable world, there is really no overriding need for long-range plans." [Ref. 224:p. 19] However, the real world is not stable, so planning must definitely be considered, in particular top-down direction or guidance. [Ref. 225:p. 11] The programmer depends on a planning system that estimates resource needs, reflects agreed-upon policies and procedures, and yields balanced resource mixes. [Ref. 226:p. 93]

One defect in PPBS is that it does not have any way of addressing international economic problems. [Ref. 227:p. 11] Brown proposes a unique idea: "the purpose of national

security deliberations should not be to maximize military strength but to maximize national security." [Ref. 228:p. 23] He considers energy, food, soil, science, ecology, and social structure contributors to national security and requiring coordinated international response. Brown believes that "the traditional military concept of 'national security' is growing less adequate as non-military threats grow more formidable." [Ref. 229:p. 24] Although his idea has merit, the cost to maintain a defense establishment would probably be less than supporting the rest of the world economically. Additionally, the Planning Phase would require vast resources, which Congress most likely will not relinquish.

Another concern is the increased influence of civilian officials into the concerns of military tacticians. Congress in particular is guilty of these actions. Kintner noted that "during the past several years, professional military men have had less and less to say as to how such decisions on military posture are made and have had less and less influence on the actual choices." [Ref. 230:pp. 405-406] He proposed the military be given adequate representation on the strategy formulating group and planning and conduct of military operations be restored to the military as its primary province. [Ref. 231:p. 410] The inclusion of

the Chairman of the JCS on the DRB and NSC has resolved a lot of the problems Kintner highlighted.

The most uncertain, unsettling problem with the Planning Phase of PPBS process will be the new role of the Chairman of the JCS. If his biases from his past service days still exist, then his actions in the Planning Phase will be detrimental to other services. Other alternatives would be to add all the Service Chiefs to the DRB and NSC, or create an entirely new Service independent of the Army, Navy, Air Force or Marine Corps.

LIST OF REFERENCES

1. Kramer, Fred A., ed. Contemporary Approaches to Public Budgeting. Cambridge, Mass.: Winthrop Publishers, Inc., 1979.
2. Brundage, Percival Flack. The Bureau of the Budget. New York: Praeger Publishers, 1970.
3. Mosher, Frederick C. Program Budgeting: Theory and Practice. New York: American Book-Stratford Press., Inc., 1954.
4. Augustine, Norman R. "Foreword." In Industrial Capacity and Defense Planning. Eds. Lee D. Olvay, Henry A. Leonard, and Bruce E. Arlinghaus. Lexington, Mass.: D.C. Heath and Company, 1983.
5. Kingston-McCloughry, E. J. Defense Policy and Strategy. New York: Frederick A. Praeger, Publishers, 1960.
6. Scitovsky, Tibor, Edward Shaw, and Lorie Tarshis. Mobilizing Resources for War. New York: McGraw-Hill Book Company, Inc., 1951.
7. Towle, Philip, ed. Estimating Foreign Military Power., New York: Holmes & Meier Publishers, Inc., 1982.
8. Hitch, Charles J., and Roland N. McKean. Defense Economic Issues, Part Two: Efficiency in using Defense Resources. Washington, D. C.: National Defense University, 1982.
9. McNamara, Robert S. "The Foundation for Defense Planning and Budgeting." In A Modern Design for Defense Decision. Ed., Samuel A. Tucker. Washington, D.C.: Industrial College of the Armed Forces, 1966.
10. Williams, Benjamin H. The Economics of National Security: Research and Development. Washington, D.C.: Industrial College of the Armed Forces, 1958.
11. Aron, Raymond. The Great Debate: Theories of Nuclear Strategy. Trans. Ernst Powel. Garden City, New York: Doubleday & Company, Inc., 1965.

12. Brown, George F., Jr. and Lawrence Korb. "The Economic and Political Restraints on Force Planning." In American Defense Policy. Eds., John F. Renhart and Steven R. Sturn. Baltimore, Maryland: Johns Hopkins University Press, 1982.
13. Quade, E. S. Analysis for Public Decisions. New York: Elsevier Science Publishing Company, Inc., 1982.
14. Schlesinger, James R. "Planning-Programming-Budgeting Hearings before the Subcommittee on National Security and International Operations of the Committee on Government Operation United States Senate." Washington, D. C.: U.S. Government Printing Office., 1969.
15. Brundage, Percival Flock. The Bureau of the Budget. New York: Praeger Publishers, 1970.
16. Ott, David J., and Attiat F. Ott. Federal Budget Policy. Washington, D.C.: The Brookings Institution, 1969.
17. Schultze, Charles L. The Politics and Economics of Public Spending. Washington, D.C.: The Brookings Institution, 1968.
18. Musgrave, Richard A. and Peggy B. Musgrave. Public Finance in Theory and Practice. San Francisco: McGraw-Hill Book Company, 1976.
19. Schultze, Charles L. "Planning-Programming-Budgeting." Washington, D.C.: Bureau of the Budget, 18 July 1967.
20. Ibid.
21. Kingston-McCloughry, E. J. Defense Policy and Strategy. New York: Frederick A. Praeger, Publishers, 1960.
22. Gove, Philip Babcock, ed. Webster's Third New International Dictionary of the English Language Unabridged. 3rd ed., Springfield, Mass.: G. C. Merriam Company, Publishers, 1961.
23. Euske, Kenneth J. Management Control: Planning, Control, Measurement, and Evaluation. Amsterdam: Addison-Wesley Publishing Company, 1984.
24. Ibid.

25. Williams, Benjamin H. The Economics of National Security. Washington, D.C.: Industrial College of the Armed Force, 1959.
26. Nutt, Paul C. "An Experimental Comparison of the Effectiveness of Three Planning Methods." Management Science. 23 (1977), 499-511.
27. Novick, David. "Resource Analysis and Long-Range Planning." Rand Corporation Memorandum RM-3658-PR. Santa Monica, Ca.: Rand Corporation, June 1963.
28. Novick, David. "Program Budgeting: Long-Range Planning in the Department of Defense." RAND Corporation Memorandum RM-3359-ASDC. Santa Monica, CA.: Rand Corporation, November 1962.
29. Smith, John Grieve. Business Strategy. New York: Basil Blackwell Ltd., 1985.
30. Schick, Allen. "The Road to PPB: The Stages of Budget Reform." Public Administration Review. No.4 (1966), pp. 243-258. (DRMEC Handout X-34).
31. Executive Office of the President, Bureau of the Budget. "Preparation and Execution of the Federal Budget." Washington, D.C.: GPO, April 1966. (Defense Resources Management Education Center-DERMEC Handout 1X-12)
32. "Summary of the DOD Planning, Programming and Budgeting System (PPBS)." (DRMEC Handout 1X-38A).
33. Collins, John M. U.S. Defense Planning. Boulder, Colorado: Westview Press, 1982.
34. Evans, James. "The Benefits and Pitfalls of Planning, Programming, Budgeting (PPB) and Zero Base Budgeting (ZBB) System." Dist. U.S. Army Command and General Staff College, 1980.
35. Fincher, Edward G. "Planning/Programming/Budgeting System: The Only Game In Town." Dist. Defense Systems Management School, 1976.
36. Hitch, Charles J., and Roland N. McKean. The Economics of Defense in the Nuclear Age. New York: Atheneum, 1978.

37. Beckstead, Robert W. Defense Economic Issues, Part One: Some Implications of Managing Defense Resources. Washington, D.C.: National Defense University, 1982.
38. Borklund, C. W. "Defense Planning-Budgeting-Acquisition: Why Strategy is Back Up Front." Government Executive. No 10 (1981), pp. 17-26.
39. Euske, Kenneth J. Management Control: Planning, Control, Measurement, and Evaluation. Amsterdam: Addison-Wesley Publishing Company, 1981
40. "Implementation of the Planning, Programming, and Budgeting System (PPBS)." Department of Defense Instruction No 7045.7. Washington, D.C.: GPO 1984. (DERMEC Handout IX-38).
41. Department of Defense. Manufacturing Management Handbook for Program Managers. Fort Belvoir, Virginia: Defense Systems Management College, 1984.
42. "Navy Programming Manual." OPNAV 90P-1E. (DERMEC Handout IX-29 (r-7)).
43. Bumgardner, James J. "Improving the Unified Commander's Role in PPBS Programming." Dist. Air Command and Staff College, 1984.
44. Ibid.
45. Gove, Philip Babcock, ed. Webster's Third New International Dictionary of the-English Language Unabridged.
46. Mosher, Frederick C. Program Budgeting: Theory and Practice.
47. Novick, David. "Resource Analysis and Long - Range Planning."
48. Novick, David., "Program Budgeting: Long-Range Planning in the Department of Defense."
49. Clark, Keith C., and Laurence J. Legere, eds. The President and the Management of National Security. New York: Frederick A. Praeger, Publishers, 1969.
50. Evans, James. "The Benefits and Pitfalls of PPB and ZBB System."

51. Bumgardner, James J. "Improving the Unified Commander's Role in PPBS Programming."
52. Fincher, Edward G. "Planning/Programming/Budgeting System: The Only Game in Town."
53. Kramer, Fred A., ed. Contemporary Approaches to Public Budgeting. Cambridge, Mass.: Winthrop Publishers, Inc.
54. Bumgardner, James J. "Improving the Unified Commander's Role in PPBS Programming."
55. Gove, Philip Babcock, ed. Webster's Third New International Dictionary of the English Language Unabridged.
56. Evans, James. "The Benefits and Pitfalls of PPB and ZBB Systems."
57. Fincher, Edward G. "Planning/Programming/Budgeting System: The Only Game in Town."
58. Rovetch, Warren and John J. Gaskie, eds. Program Budgeting for Planners. New York: Praeger Publishers, 1974.
59. Mosher, Frederick C. Program Budgeting: Theory and Practice.
60. Dawson, John E. "Origins of the Federal Budget Process . . . the Challenge of Particularism and Synthesis." Armed Forces Comptroller. No. 4 (1975), pp. 2-7. (DERMEC Handout IX-18).
61. Bumgardner, James J. "Improving the Unified Commander's Role in PPBS Programming."
62. Yoshpe, Harry B., ed. Requirements: Matching Needs with Resources. Washington, D.C.: Industrial College of the Armed Forces, 1964.
63. Mosher, Frederick C. Program Budgeting: Theory and Practice.
64. Kramer, Fred A. "An Introduction to Contemporary Public Budgeting." In Contemporary Approaches to Public Budgeting. ed. Fred A. Kramer, Cambridge, Mass.: Winthrop Publishers, Inc., 1979.
65. Dawson, John E. "Origins of the Federal Budget Process." Armed Forces Comptroller.

66. Yoshpe, Harry B. "Wartime Requirements in Historical Perspective." In Requirements: Matching Needs with Resources. Ed. Harry B. Yoshpe, Washington D.C.: Industrial College of the Armed Forces, 1964.
67. Ibid.
68. Williams, Benjamin H. Retrospect and Prospect: The Economics of National Security. Washington, D.C.: Industrial College of the Armed Forces, 1959.
69. Ott, David J. and Attiat F. Ott. Federal Budget Policy.
70. Williams, Benjamin H., Retrospect and Prospect.
71. Mosher, Frederick C. Program Budgeting: Theory and Practice.
72. Ibid.
73. Williams, Benjamin H. Retrospect and Prospect.
74. Williams, Benjamin H. Research and Development: The Economic of National Security. Washington, D.C. : International College of the Armed Forces, 1960.
75. Mosher, Frederick C. Program Budgeting: Theory and Practice.
76. Ries, John. The Management of Defense: Organization and Control of the U.S. Armed Services. Baltimore, Maryland: The Johns Hopkins Press, 1964.
77. Hitch, Charles J. "Evolution of the Departme of Defense." In A Modern Design for Defense Decision. Ed. Samuel A. Tucker, Washington, D.C.: Industrial College of the Armed Forces, 1966.
78. Ibid.
79. Ries, John C. The Management of Defense.
80. Clark, Keith C., and Laurence J. Legere, eds. The President and the Management of National Security.
81. Hitch, Charles J. "Evolution of the Department of Defense."

82. Mosher, Frederick C. Program Budgeting: Theory and Practice.
83. Clark, Keith C., and Laurence J. Legere, eds. The President and the Management of National Security.
84. Mosher, Frederick C. Program Budgeting: Theory and Practice.
85. Ibid.
86. Ibid.
87. Clark, Keith, and Laurence J. Legere, eds., The President and the Management of National Security.
88. Ries, John C. The Management of Defense.
89. McNair, Robert E. "Forward". In Program Budgeting for Planners. Warren Rovetch and John J. Gaskie, New York: Praeger Publishers, 1974.
90. Euske, Kenneth J. Management Control: Planning Control, Measurement, and Evaluation. Amsterdam: Addison-Wesley Publishing Company, 1984.
91. Dawson, John E. "Origins of the Federal Budget Process."
92. Clark, Keith C., and Laurence J. Legere, eds. The President and the Management of National Security. New York: Frederick A. Praeger, Publishers, 1969.
93. Collins, John M. U.S. Defense Planning, A Critique. Boulder, Colorado: Westview Press, 1982.
94. "National Defense." The World Almanac & Book of Facts 1985.
95. Ries, John C. The Management of Defense: Organization and Control of the U.S. Armed Services. Baltimore, Maryland: The Johns Hopkins Press, 1964.
96. Clark, Keith C., and Laurence J. Legere, eds. The President and the Management of National Security.
97. Ibid.
98. Boyd, Gerald M. "President Orders Military Changes." The New York Times, 3 April 1986, P. A-18, Col. 3.

99. Ries, John C. The Management of Defense.
100. Mosher, Frederick C. Program Budgeting: Theory and Practice. New York: American Book-Stratford Press., Inc., 1954.
101. Beckstead, Robert W. "Part One: Some Implications of Managing Defense Resources." Defense Economic Issues. Washington, D. C.: National Defense University, 1982
102. Department of the Navy, Programming Manual (OPNAV 90P-1E). Washington, D. C.: Department of the Navy Program Information Center, July 1979
103. Beckstead, Robert W. "Part One: Some Implications of Managing Defense Resources."
104. Ibid.
105. Ibid.
106. Ibid.
107. Ibid.
108. Brown, Harold. "Statement before the Subcommittee on Investigations Committee on Armed Services House of Representative." 3 October 1978. (DRMEC Handout 1X-79)
109. McNamara, Robert S., and General Maxwell D. Taylor. "Joint Chiefs of Staff and the Defense Budget." In A Modern Design for Defense Decision. Industrial College of the Armed Forces, 1966.
110. Gordon, Michael R. "Joint Chiefs Find No Cheating," The New York Times, 8 February 1986, p. 6, Col. 1.
111. Novick, David. "Program Budgeting: Long-Range Planning in the Department of Defense." Rand Corporation, November 1962.
112. Borklund, C. W. "Defense Planning-Budgeting-Acquisition: Why Strategy in Back up Front." Government Executive. No. 10 (1981), pp. 17, 19, 22, 24, 26. (DRMEC Handout 1X-92)
113. Department of Defense Directive Number 7045.14. "The Planning, Programming, and Budgeting System (PPBS)." Washington, D.C.: ASD(C), 22 May 1984.

114. Department of Defense Instruction Number 7045.7.
"Implementation of the Planning, Programming, and Budgeting
System (PPBS)." Washington, D.C.: ASD(C), 23 May 1984.
115. Bischoff, Robert C. "The Role of the JCS in th PPBS."
Armed Forces Comptroller. No. 2 (1983), pp. 6-9.
116. Donnelly, Charles H. "Planning and Computing Military
Requirements." In Requirements: Matching Needs with
Resources. Ed. Harry B. Yoshpe. Washington, D.C.: 1964.
117. Bischoff, Robert C. "The Role of the JCS in PPBS."
118. Fincher, Edward G. "Planning/Programming/Budgeting
System=The Only Game in Town."
119. Adolphi, Ronald L. "Resource CINC Requirements: The Case
for a Greater Unified Command Role in the PPBS Process."
Dist. The Industrial Colleges of the Armed Forces, National
Defense University, 1984.
120. Department of the Navy. Programming Manual (OPNAV 90P-
1E).
121. Bischoff, Robert C. "The Role of the JCS in the PPBS."
122. Department of the Navy. Programming Manual (OPNAV 90P-
1E).
123. Ibid.
124. Bischoff, Robert C. "The Role of the JCS in the PPBS."
125. Mosher, Frederick C. Program Budgeting: Theory and
Practice.
126. Department of the Navy. Programming Manual (OPNAV 90P-
1E).
127. Bischoff, Robert C. "The Role of the JCS in the PPBS."
128. Department of the Navy. Programming Manual (OPNAV 90P-
1E).
129. Bischoff, Robert C. "The Role of the JCS in the PPBS."
130. Mosher, Frederick C. Program Budgeting: Theory and
Practice.

131. Department of Defense. Acquisition Strategy Guide. Fort Belvoir, Virginia: Defense Systems Management College, July 1984.
132. "Executive Departments and Agencies." Information Please Almanac. 1986 ed.
133. Ries, John C. The Management of Defense.
134. Collins, John M. U.S. Defense Planning, A Critique.
135. Yoshpe, Harry B. Requirements: Matching Needs with Resources. Washington, D.C.: Industrial College of the Armed Forces, 1964
136. Clark, Keith C., and Laurence J. Legere, eds. The President and the Management of National Security.
137. Odeen, Philip. "Remarks by Philip Odeen." In National Security Policy Organization in Perspective. Eds. Lawrence J. Korb and Keith D. Hahn, Washington, D.C.: American Enterprise Institute, 1981.
138. Clark, Keith C., and Laurence J. Legere., eds. The President and the Management of National Security.
139. Hyland, William. "Remarks by William Hyland." In National Security Policy Organization in Perspective. Eds. Laurence J. Korb and Keith D. Hahn, Washington, D.C.: American Enterprise Institute, 1981.
140. Williams, Benjamin H. Retrospect and Prospect: The Economic of National Security. Washington, D.C.: Industrial College of the Armed Forces, 1959.
141. Yoshpe, Harry B. Requirements: Matching Needs with Resources.
142. Clark, Keith C., and Laurence J. Legere, eds. The President and the Management of National Security.
143. Ibid.
144. McFadden, Robert D. "President Calls Meeting of National Security Council for Today." The New York Times. 2 September 1983, p. A-1, col. 5.
145. Gordon, Michael D. "The New Skipper." The New York Times. 5 December, 1985, p. A-14, col. 1.

146. Clark, Keith C., and Laurence J. Legere, eds. The President and the Management of National Security.
147. Korb, Lawrence J. "The Defense Policy of the United States." In The Defense Policies of Nations. Eds. Douglas J. Murray and Paul R. Viotti., Baltimore, Maryland: The Johns Hopkins University Press, 1982.
148. Donnelly, Charles H. "Planning and Computing Military Requirement.." In Requirements: Matching Needs with Resources. Washington, D.C.: Industrial College of the Armed Forces, 1964.
149. Mosher, Frederick C. Program Budgeting: Theory and Practice.
150. Department of the Navy. Programming Manual (OPNAV 90P-1E).
151. Ibid.
152. Falk, Stanley L. "Military Requirements and the Defense Budget." In Requirements: Matching Needs with Resources. Ed. Harry B. Yoshpe. Washington, D.C.: Industrial College of the Armed Forces, 1964.
153. Yoshpe, Harry B. Requirements: Matching Needs with Resources.
154. Beckstead, Robert W. Part One: Some Implications of Managing Defense Resources, Defense Economic Issues. Washington, D.C.: National Defense University, 1982.
155. Brundage, Percival Flack. The Bureau of the Budget. New York: Praeger Publishers, 1970.
156. Ibid.
157. Korb, Lawrence J. "The Defense Policy of the United States."
158. Ries, John C. The Management of Defense: Organization and Control of the U.S. Armed Services.
159. Williams, Benjamin H. Retrospect and Prospect: The Economics of National Security.
160. Yoshpe, Harry B. Requirements: Matching Needs with Resources.

161. Gelb, Leslie H. "McFarlane Carving his Niche." The New York Times. 28 March 1984, p. B-10, col. 3.
162. Gelb, Leslie H. "Where Anonymous Power Accrues." The New York Times. 4 June 1985, p. A-22, col. 3.
163. Mosher, Frederick C. Program Budgeting: Theory and Practice.
164. Ibid.
165. Collins, John M. U.S. Defense Planning, A Critique.
166. Ibid.
167. Clark, Keith C., and Laurence J. Legere, eds. The President and the Management of National Security.
168. Kertsz, Stephen D. "Objectives and Priorities." In National Security: Political, Military, and Economic Strategies in the Decade Ahead. Eds., David M. Abshire and Richard V. Allen, New York: Frederick A. Praeger, Publisher, 1963.
169. Collins, John M. U.S. Defense Planning, A Critique.
170. Till, Geoffrey. "Perceptions of Naval Power Between the Wars: The British Case." In Estimating Foreign Military Power. Ed., Philip Towle, New York: Holmes & Meier Publishers, Inc., 1982.
171. Clark, Keith C., and Laurence J. Legere, eds. The President and the Management of National Security.
172. Collins, John M. U.S. Defense Planning, A Critique.
173. Ibid.
174. Ibid
175. Clark, Keith C., and Laurence J. Legere, eds. The President and the Management of National Security.
176. Collins, John M. U.S. Defense Planning, A Critique.
177. Department of the Navy. Programming Manual (OPNAV 90P-1E).

178. Shribman, David. "Side Effect: Peek at U.S. Intelligence Abilities." The New York Times. 2 September 1983, P. A-7, col. 3.
179. Collins, John M. U.S. Defense Planning, A Critique.
180. Department of the Navy. Programming Manual (OPNAV 90P-1E).
181. Collins, John M. U.S. Defense Planning, A Critique.
182. Friedman, Fredrick L., Alfred S. Rhode, and Francis E. O'Connor. "Integration of Manpower, Personnel, and Training Issues form the Material System Acquisition Process into the Planning, Programming, and Budgeting System." Technical Report 526. Arlington, VA: Information Spectrum, Inc. March 1981.
183. Collins, John M. U.S. Defense Planning, A Critique.
184. Deputy Secretary of Defense Memorandum. "The Planning Phase of DOD PPB System." Washington, D.C.: DOD, 12 June 1981.
185. Deputy Secretary of Defense Memorandum. "Management of the DOD Planning, Programming and Budgeting System." Washington, D.C.: DOD, 27 March 1981.
186. Department of the Navy. RDT&SE Management Guide (NAVSO P-2457). Washington, D.C.: ASN Research, Engineering and Systems, January 1985.
187. Department of the Navy. Navy Program Manager's Guide. Washington, D.C.: Naval Material Command, January 1985.
188. Beckstead, Robert W. Part One: Some Implications of Managing Defense Resources, Defense Economic Issues.
189. Draper, Jerry Y. "Role of the Defense Resource Board in the Planning, Programming, and Budgeting System." Dist. U.S. Army War College, 1985.
190. Department of Defense Instruction, Number 7045.7. "Implementation of the Planning, Programming, and Budgeting System (PPBS)." Washington, D.C.: ASD(C), 23 May 1984.

191. Korb, Lawrence J. "The Defense Policy of the United States." In Defense Policies of Nations, A Comparative Study. Eds., Douglas J. Murray and Paul R. Viotti, Baltimore, Maryland: The Johns Hopkins University Press, 1982.
192. Ibid.
193. "Pentagon Surplus Tied to Inflation Estimates." The New York Times. 30 January 1986, p. B-9, col. 1.
194. Halloran, Richard. "Report says Navy lacks Capacity to Deploy Combat-Ready Carriers." The New York Times. 9 December 1983, p. A-1, A-24, col. 4.
195. Keller, Bill. "Pentagon Cancels Antiaircraft Gun: 'Not Worth Cost'." The New York Times. 28 August 1985, p. A-1, A-18, col. 1.
196. Euske, Kenneth J. Management Control: Planning, Control Measurement, and Evaluation.
197. Halloran, Richard. "Armed Services Plan Discharges to Meet Budget." The New York Times, 7 March 1986, p. A-12, col. 1.
198. "Tennesseans Fight a Military Center." The New York Times, 12 February 1986, p. A-23, col. 1.
199. The President's Blue Ribbon Commissions on Defense Management. "A Formula for Action: A Report to the President on Defense Acquisition." 1985.
200. Department of Defense. Planning, Programming, and Budgeting System. Washington, D.C.: GAO:OACH-84-5, September 1983.
201. Schick, Allen. "The Road to PPB: The Stages of Budget Reform."
202. Puritano, Vincent, and Lawrence Korb. "Streamlining PPBS in Better Manage National Defense." Public Administration Review, No. 5 (1981), pp. 564-574.
203. Fox, Thomas A. "Can the Planning, Programming, Budgeting System be Further Enhanced?" Dist. Industrial College of the Armed Forces, May 1984.

204. Smithies, Arthur. "PPBS, Suboptimization, and Decentralization." RAND Corporation Memorandum RM-6178-PR, Santa Monica, CA: RAND Corporation, April 1970.
205. Gordon, Michael R. "Can the Defense Department be Managed? This Administration Thinks It Can." In Industrial Capacity and Defense Planning. Eds. Lee D. Olvey, Henry A. Leonard, and Bruce E. Arlinghaus, Lexington, Mass.: D.C. Heath and Company, 1983.
206. Williams, Benjamin H. Research and Development, The Economics of National Security.
207. Dawson, John E. "PPBS: Yesterday, Today and Tomorrow." Armed Forces Comptroller. No. 2 (1972), pp. 15-23
208. Williams, Benjamin H. Retrospect and Prospect, the Economics of National Security.
209. Department of the Navy. Planning, Programming, Budgeting, and Appraising Study. Washington, D.C.: NAVEXOS P-2426 B-2, October 1962.
210. Mosher, Frederick C. Program Budgeting: Theory and Practice.
211. Falk, Stanley L. "Military Requirements and the Defense Budget." In Requirements: Matching Needs with Resources. Ed. Harry B. Yoshpe, Washington, D.C.: Industrial College of the Armed Forces, 1964.
212. Korb, Lawrence J. "The Defense Policy of the United States." In The Defense Policies of Nations, A Comparative Study. Eds. Douglas J. Muray and Paul R. Viotti. Baltimore, Maryland: The Johns Hopkins University Presss, 1982.
213. Collins, John M. U.S. Defense Planning, A Critique.
214. Ibid.
215. Ibid.
216. Kingston-McCloughry, E.J. Defense Policy and Strategy. New York: Frederick A. Praeger, Publishers, 1960.
217. Department of the Navy. Programming Manual (OPNAV 90P-1E).

218. Lower, Dallas Terry. "Analysis of the Office of Secretary of Defense and Department of the Army Management Changes Resulting from the 1981 Revisions to the Planning, Programming and Budgeting System." Thesis, Naval Postgraduate School, December 1981.
219. Beckstead, Robert W. Part One: Some Implications of Managing Defense Resources, Defense Economic Issues.
220. Ries, John C. The Management of Defense, Organization and Control of the U.S. Armed Services.
221. Boyd, Gerald M. "President Orders Military Changes." The New York Times, 3 April, 1986, p. A-18, col. 3.
222. Cox, Robert Justin. "Reorganization of the Joint Chiefs of Staff: Implications on JCS Budget Influence." Thesis, Naval Postgraduate School, December 1985.
223. Bennett, Charles E. "Don't 'Reform' the Joint Chiefs." The New York Times, 20 February 1986, p. A-23, col. 1.
224. Clark, Rolf, and Samuel B. Graves. "Extended Planning in the Navy and the Resource Dynamics Projects." In The Defense Planning, Programming, and Budgeting System (PPBS): Past, Present, and Future. Washington, D.C.: Center for Naval Analysis, 1982.
225. Cunningham, C. J. "A Comparative Review of Air Force Programming." In The Defense Planning, Programming, and Budgeting System (PPBS): Past, Present, and Future. Washington, D.C.: Center for Naval Analysis, 1982.
226. Cohen, I. K., J. H. Bigelow, and S. M. Drezner. "Capability Programming: Resources to Achieve Combat Capability Objectives." In The Defense Planning, Programming, and Budgeting System (PPBS): Past, Present, and Future. Washington, D.C.: Center for Naval Analysis, 1982.
227. Hyland, William. "Remarks by William Hyland." In National Security Policy Organization in Perspective. Eds. Lawrence J. Korb, and Keith D. Hahn. Washington, D.C.: American Enterprise Institute, 1981.

228. Brown, Lester. "An Untraditional View of National Security." In American Defense Policy. Eds. John F. Reichart, and Steven R. Sturm. Baltimore, Maryland: The Johns Hopkins University Press, 1982.
229. Ibid.
230. Kintner, William R. "The Politicalization of Strategy." In National Security: Political, Military, and Economic Strategies in the Decade Ahead. Eds. David M. Abshire, and Richard V. Allen. New York: Frederick A. Praeger, Publisher, 1963.
231. Ibid.

INITIAL DISTRIBUTION LIST

	No. Copies
1. Defense Technical Information Center Cameron Station Alexandria, Virginia 22304-6145	2
2. Library, Code 0142 Naval Postgraduate School Monterey, CA 93943-5002	2
3. Prof. J. L. McCaffery Code 54Mm Department of Administrative Sciences Naval Postgraduate School Monterey, CA 93943-5000	1
4. LCDR James R. Duke, USN Code 54Dc Department of Administrative Sciences Naval Postgraduate School Monterey, CA 93943-5000	1
5. LCDR Carl E. Hance USS Badger (FF-1071) FPO, San Francisco 96661-1431	10

END

2-87-

DTIC